

Amendments to the Specification

Please amend the paragraph beginning at page 5, line 7 with the following amended paragraph:

The invention also relates to a pharmaceutical composition that includes a pharmaceutically acceptable carrier and an amount of a vitamin K-dependent polypeptide effective to inhibit clot formation in a mammal. The vitamin K-dependent polypeptide includes a modified GLA domain that enhances membrane-binding affinity of the polypeptide relative to a corresponding native vitamin K-dependent polypeptide. In some embodiments, activity of the polypeptide also is enhanced. The modified GLA domain includes at least one amino acid substitution. The vitamin K-dependent polypeptide may be, for example, protein C, activated protein C or active site modified factor VIIa, protein S, or active site modified factor IXa. The comparison composition can include an anticoagulant agent (e.g. aspirin).

Please replace the paragraph beginning at page 8, line 10 with the following amended paragraph:

Figure 15 depicts the membrane interaction properties of different vitamin K-dependent proteins. **Panel A** The top panel compares membrane interaction of human (filled circles) and bovine (open circles) Factor X. **Panel B** The middle panel shows membrane interaction by normal bovine prothrombin fragment 1 (open circles), fragment 1 modified with TNBS in the absence of calcium (filled circles) and fragment 1 modified with TNBS in the presence of 25 mM calcium (filled squares). **Panel C** The bottom panel shows the rate of protein Z binding to vesicles at pH 9 (filled circles) and 7.5 (open circles).

Please replace the paragraph beginning at page 45, line 9 with the following amended paragraph:

The results in Figure 15C the bottom panel of Figure 15 show that the association rate for protein Z was substantially improved at pH 9, where an amino terminal should be uncharged. The rate constant obtained from these data was about 12-fold higher at pH 9 than at pH 7.5 (Figure 15C).